

Title (en)  
REFRIGERATION CYCLE DEVICE

Title (de)  
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication  
**EP 3910262 A4 20211229 (EN)**

Application  
**EP 19908451 A 20190109**

Priority  
JP 2019000356 W 20190109

Abstract (en)  
[origin: EP3910262A1] A refrigeration cycle apparatus (1) of the present invention includes: a refrigerant circuit (2); and refrigerant. The refrigerant circuit (2) includes a compressor (4), a condenser (5), an expansion valve (6), an evaporator (7), and an internal heat exchanger (8). The refrigerant is a hydrocarbon refrigerant. The internal heat exchanger (8) includes: an inner pipe (8a); and an outer pipe (8b). The internal heat exchanger (8) is configured to cause heat exchange between the refrigerant flowing inside the inner pipe (8a) in a direction from the condenser (5) toward the expansion valve (6), and the refrigerant flowing inside the outer pipe (8b) and outside the inner pipe (8a) in a direction from the evaporator (7) toward the compressor (4). The refrigerant flowing inside the outer pipe (8b) and outside the inner pipe (8a) is entirely gas.

IPC 8 full level  
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Citation (search report)

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- [I] DE 19944951 A1 20010322 - BEHR GMBH & CO [DE]
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- [A] US 2010326640 A1 20101230 - HIGASHIYAMA NAOHISA [JP], et al
- See also references of WO 2020144764A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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